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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/994,482 | 11/26/2001 | Hua Harry Li | 16523.311901 | 7248 |

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EXAMINER

SALTARELLI, DOMINIC D

ART UNIT PAPER NUMBER

2611

4

DATE MAILED: 12/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/994,482 | LI ET AL. | |
| | Examiner | Art Unit | |
| | Dominic D Saltarelli | 2611 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 November 2001 .
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-53 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-53 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 26 November 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____ .
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
- 4) Interview Summary (PTO-413) Paper No(s). _____ .
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other:

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Page 11, lines 22-28 describe step 404 of Figure 4 to perform packetizing of encoded data, while Figure 4 discloses the packetizing step occurs at 410. Appropriate correction is required.

Claim Objections

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 52 been renumbered 53.

3. Claims 1, 18, and 35 are objected to because of the following informalities:

Claim 1, lines 19-21, state "or to retrieve stored streams of IP based packets from said storage means and forward the retrieved IP packet to said gateway means". This statement is redundant in view of lines 18-19 which state "*forward a selected stream of IP based packets from either said content creator subsystem or said storage means to said gateway means*".

Claim 18, lines 25-26, state "or to retrieve stored streams of IP based packets from said storage means and forward the retrieved IP packet to said gateway means". This statement is redundant in view of lines 23-25 which state

“forward a selected stream of IP based packets from either said content creator subsystem or said storage means to said gateway means”.

Claim 35, lines 26-27, state “or to retrieve stored streams of IP based packets from said storage means and forward the retrieved IP packet to said gateway means”. This statement is redundant in view of lines 24-26 which state *“forward a selected stream of IP based packets from either said content creator subsystem or said storage means to said gateway means”.*

The redundant statement should be removed from each respective claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8, 25, and 42 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 8, 25, and 42 are dependent upon claims 1, 18, and 35, which identify the packetizing of encoded digital data takes place in the media content creator subsystem, Claims 8, 25, and 42 describe encoded digital data is packetized by the media streaming subsystem, rendering the claims indefinite as to whether the media streaming subsystem performs packetizing instead of the media content creator subsystem, or if both perform packetizing of encoded digital data.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-16, 18-33, 35-50, and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al. (US 2002/0026645 A1) [Son] in view of Graber et al. (US 2002/0116722 A1) [Graber] and DeFreese et al. (6,493,876) [DeFreese].

Regarding claims 1, 18, and 35, Son discloses a system, method, and corresponding computer program (152) (paragraph 26, lines 7-9) on a computer readable medium (150), for providing to system users IP centric (Abstract, lines 11-17) multi-channel, time-shifted and real time telecommunication services (paragraph 21, lines 1-7) including television on demand and video on demand (paragraph 22, lines 6-9), the system, method, and corresponding computer program comprising:

a media content creator subsystem (144) (paragraph 28, lines 6-14) for receiving video signal streams and compressing the digital data into IP based packets (paragraph 28, lines 14-21) for transmission over a broadband network (paragraph 21, lines 4-7);

a storage means (148) (paragraph 26, lines 11-17) for storing IP based packets and permitting stored IP based packet to be retrieved therefrom (paragraph 36);

a media streaming subsystem (102) for receiving and forwarding streams of IP based packets (paragraph 23, lines 5-13), said media streaming subsystem being responsive to a user request (paragraph 27, lines 1-7) and operative to forward a selected stream of IP based packets from either said content creator subsystem (post-processing, paragraph 32, lines 1-7) or from said storage means (pre-processing, paragraph 28, lines 14-24) to a distribution network (through switch 142, shown in Figure 1, paragraph 25, lines 1-6);

and a content management subsystem (140) (paragraph 27, lines 1-6) for controlling user access to the system and providing user account management (paragraph 39, lines 14-18).

Son additionally discloses a distribution network (104) for receiving packets from multiple sources (101, 201n) and combining such packets (paragraph 50) for transmission over a broadband communication network (paragraph 23, lines 10-15)

Son fails to disclose the media content creator subsystem to receive multiple video signal streams, each having one of several industry standard communication formats, and for converting the incoming video signal streams into digital data.

Son additionally fails to disclose a gateway means for receiving packets from multiple sources and combining such packets for transmission over a broadband communication network.

Graber discloses a media content creator (152) for receiving multiple video streams (Figure 3) each one having one of several industry standard communication formats (paragraph 31, lines 1-4), and for converting the incoming video signal streams into digital data (paragraph 32, lines 1-2) in order to enable users to selectively view several different types of video signals in digital format, a more accurate, robust, and portable signal format.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system, method, and corresponding computer program disclosed by Son to include in the media content creator subsystem the ability to receive multiple video streams each one having one of several industry standard communication formats, and convert the incoming video signal streams into digital data as taught by Graber. The reason for doing so would be to enable users to selectively view several different types of video signals in digital format, a more accurate, robust, and portable signal format.

DeFreese discloses a gateway means (17, 18) for receiving packets [MPEG-2 transport streams] from different sources (15, 16) (col. 11, lines 37-43) and combining such packets for transmission (col. 12, lines 1-5) over a broadband network (3, 4, 5), allowing a single head-end to provide many different types and sources of programming content to the broadband network.

It would have been obvious at the time to a person of ordinary skill in the art to further modify the system, method, and corresponding computer program disclosed by Son and Graber to include a gateway means for receiving packets

from multiple sources and combining such packets for transmission over a broadband communication network, as taught by DeFreese. The reason for doing so would be to allow a single head-end to provide many different channels of programming content to the broadband network.

Regarding claims 2, 19, and 36, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is further characterized in that the content management subsystem provides user authentication, user billing, and management of transmission channel bandwidth [availability and permissions for requested content] (Son paragraph 39, lines 14-18).

Regarding claims 3-5, 20-22, and 37-39, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is further characterized in that the digital data can be encoded in various formats (Son paragraph 36, lines 3-6), such as MPEG-1, MPEG-2, and MPEG-4.

Regarding claims 7, 24, and 41, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is further characterized in that the source of the incoming video signal streams is live camera (Graber paragraph 19, lines 1-5).

Regarding claims 14, 16, 31, 33, 48, and 50, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is further characterized in that the source of incoming video signal streams are in S-video and RGB format (Graber paragraph 31, lines 1-4 and paragraph 29, lines 14-19).

Regarding claims 15, 32, and 49, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is characterized in that the incoming video signal streams are in NTSC/PAL composite TV signal format (see NTSC in Graber paragraph 31, lines 1-4).

Regarding claims 8, 25, and 42, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is characterized in that encoded digital data is packetized by the media streaming subsystem (Son, paragraph 23, lines 5-7).

Regarding claims 9, 26, and 43, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, and is further characterized in that the media streaming subsystem provides the

user access to time-shifted television programming in an order selected by the user (Son paragraph 22, lines 6-11).

Regarding claims 10, 27, and 44, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is further characterized in that the media streaming subsystem may simultaneously provide multiple streams of IP based packets each encoded based on a different standard (Son paragraph 32, lines 1-7 and paragraph 36, lines 3-7)

Regarding claims 11, 28, and 45, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is further characterized in that the entire system is scalable, as any number of head ends and any number of data link converters may be coupled to the stream distribution network (Son Figure 1, and paragraph 10, lines 1-7).

Regarding claims 13, 30, and 47, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is further characterized in that the system is capable of providing services to both wired [cable, DSL] and wireless [satellite] networks (Son paragraph 21, lines 1-7).

8. Claims 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son in view of Graber.

Regarding claim 52, Son disclose a method for receiving IP centric (Abstract, lines 11-17) multi-channel, time-shifted and real time telecommunication services (paragraph 21, lines 1-7) including television on demand, video on demand, and karaoke on demand [any content that may be streamed](paragraph 22, lines 6-9), said method comprising, transmitting a user selection (paragraph 27, lines 1-6) of a television program to a remote system, wherein said system encodes digital data into IP based packets based on multiple compression standards (paragraph 28, lines 14-21), wherein said IP packets may be ready for transmission over a network (paragraph 28, lines 21-24), stores the IP based packets in an indexed accessible database (148) (paragraph 26, lines 14-17), and provides multiple streams of IP based packets to the user upon request (paragraph 39, lines 19-22) over a broadband communication channel (paragraph 23, lines 10-15), and receiving streams of IP based packets representing the user selected television program.

Son fails to disclose the remote system receives multiple format incoming video signals from multiple sources and converts the incoming video signals into digital data.

Graber discloses a system (152) for receiving multiple video streams (Figure 3) each one having one of several industry standard communication formats (paragraph 31, lines 1-4), and for converting the incoming video signal

Art Unit: 2611

streams into digital data (paragraph 32, lines 1-2) in order to enable users to selectively view several different types of video signals in digital format, a more accurate, robust, and portable signal format.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Son to include a system which could receive multiple video streams each one having one of several industry standard communication formats, and convert the incoming video signal streams into digital data as taught by Graber. The reason for doing so would to enable users to selectively view several different types of video signals in digital format, a more accurate, robust, and portable signal format.

Regarding claim 53, Son disclose a method of providing IP centric (Abstract, lines 11-17), multi-channel time-shifted and real time telecommunication services (paragraph 21, lines 1-7) including live television, television on demand, video on demand, and karaoke on demand [any content that may be streamed](paragraph 22, lines 6-9), said method comprising, converting multiple format video signal streams into IP based packet (paragraph 28, lines 10-21) ready for transmission over broadband networks (paragraph 28, lines 21-24), receiving, storing and forwarding the IP based packets, based on a request from a user (paragraph 39, lines 19-22), each said IP based packet including data representing the converted and encoded content of a user requested program file, providing user account management which includes

Art Unit: 2611

controlling user access to the entire system (paragraph 39, lines 14-18), and providing means for transmitting the user selected, IP based packets to the user over a broadband network (paragraph 23, lines 10-17).

Son fails to disclose providing a user interface means for a user to select time-shifted telecommunication services.

Graber disclose providing a user interface means for a user to select video streams for display (paragraph 20) to provide the user a means for easily selecting a video stream.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclose by Son to include a user interface means to select the time-shifted telecommunication service video stream as taught by Graber for the advantage of providing the user a means for easily requesting said video stream from the user end.

9. Claims 6, 23, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son, Graber and DeFreese as applied to claims 1, 18, and 35 above, and further in view of Dogan et al. (Electronics Letters, 27th May 1999, vol. 35 No. 11) [Dogan].

Regarding claims 6, 23, and 40, Son, Graber and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, but fail to disclose the digital data to be encoded based on H.263.

Dogan teaches the H.263 standard is a well-known and popular video encoding standard which is optimized to run on standard circuit-switched fixed networks (Introduction, lines 1-3).

It would have been obvious at the time to modify the system, method, and corresponding computer program of Son, Graber and DeFreese to encode the digital data based on H.263, as taught by Dogan, for the advantage of using a standard optimized for circuit-switched fixed networks.

10. Claims 12, 29, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son, Graber, and DeFreese as applied to claims 1, 18, and 35 above, and further in view of Hodge et al. (2001/0005908 A1) [Hodge] and Yamamoto (JP 09259082 A).

Regarding claims 12, 29, and 46, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, which is further characterized in that the output subsystem provides for seamless integration of the multiple telecommunication services including television on demand and video on demand (Son, paragraph 22, lines 6-9), and Internet services [data stream from a service provider](Son, paragraph 28, lines 10-13).

Son, Graber, and DeFreese fail to disclose the telecommunication services include karaoke on demand and telephone services.

Yamamoto discloses a multiple service cable TV system which includes karaoke on demand. See title.

Hodge discloses providing telephone services in a CATV network (paragraphs 16 and 40), for the advantage of plural services to users.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system, method, and corresponding computer program of Son, Graber, and DeFreese to include in the telecommunication services karaoke on demand as taught by Yamamoto and telephone services as taught by Hodge, for the advantage of providing a variety of services to users.

11. Claims 17, 34, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son, Graber, and DeFreese as applied to claims 1, 18, and 35 above, and further in view of St. Arnaud et al. (4,586,081).

Regarding claims 17, 34, and 51, Son, Graber, and DeFreese disclose the system, method, and corresponding computer program of claims 1, 18, and 35, but fail to disclose the incoming audio streams are in two sound tracks.

St. Arnaud et al. discloses transmitting audio in two sound tracks, (col. 4, lines 1-3), providing stereo sound to a CATV network.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system, method, and corresponding computer program of Son, Graber, and DeFreese to receive incoming audio signal streams in two sound tracks, as taught by St. Arnaud et al. for the advantage of receiving stereo sound to distribute over the network.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wilson (2002/0184649 A1) a subscriber network system which uses IP packets, and Ward et al. (5,880,792), a multi function data streaming system.

13. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D Saltarelli whose telephone number is (703) 305-8660. The examiner can normally be reached on M-F 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Dominic Saltarelli
Patent Examiner
Art Unit 2611

DS


CHRIS GRANT
PRIMARY EXAMINER